

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-24 (Canceled).

Claim 25 (Currently Amended): A process for the production of anionic water-in-water polymeric dispersions comprising at least one finely dispersed, water-soluble and/or water-swellaable polymer A comprising anionic monomer units and, optionally, one or more of non-ionic, amphiphilic, and cationic monomer units having a M_w of $>1.0 \times 10^6$ g/mol and a continuous aqueous phase, which phase contains ~~an aliquot~~ a first portion of an amount of at least one anionic polymeric dispersing agent B comprising at least 30% by weight of anionic monomers and having an average molecular weight M_w of not more than ~~250,000~~ 95,000 g/mol, wherein the aliquot is present in an amount of at least 5% by weight, based on the weight of the total dispersion, the process comprising:

free radically polymerizing a monomer composition comprising at least the anionic monomers and, optionally, the non-ionic, amphiphilic, and cationic monomer, and from 0.5 to 3.0 wt% of an inorganic salt based on the total weight of the dispersion, to form a reaction mixture, and

on completion of said polymerization, diluting the reaction mixture with a ~~residual~~ second portion of the amount of said dispersing agent B,

wherein the anionic monomers are selected from the group consisting of

- a.) an olefinically unsaturated carboxylic acid, a carboxylic anhydride, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an ammonium salt thereof;
- b.) an olefinically unsaturated sulfonic acid, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an ammonium salt thereof;

- c.) an olefinically unsaturated phosphonic acid, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, an ammonium salt thereof; and
- d.) a sulfomethylated acrylamide, a phosphonomethylated acrylamide, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an ammonium salt thereof.

Claim 26 (Previously Presented): A process as defined in claim 25, wherein said polymeric dispersing agent B comprises at least one functional group selected from the group consisting of an ether group, a carboxyl group, a sulfone group, a sulfate ester group, an amino group, an amido group, an imido group, a tert-amino group, and a quaternary ammonium group.

Claim 27 (Currently Amended): A process as defined in claim 26, wherein said polymeric dispersing agent B is a cellulose derivative, polyvinyl acetate, starch, a starch derivative, dextran, polyvinylpyrrolidone, polyvinylpyridine, polyethylene imine, polyamine, polyvinylimidazole, polyvinylsuccinimide, polyvinyl-2-methylsuccinimide, polyvinyl-1,3-oxazolid-2-one, polyvinyl-2-methylimidazoline, a respective copolymer thereof with maleic acid, a copolymer thereof with maleic anhydride, a copolymer thereof with fumaric acid, a copolymer thereof with itaconic acid, a copolymer thereof with itaconic anhydride, a copolymer thereof with (meth)acrylic acid, a salt of a copolymer thereof with salts methacrylic acid, an esters of a copolymer thereof with (meth)acrylic acid and a copolymer thereof with a (meth)acrylamide compound.

Claims 28-29 (Canceled).

Claim 30 (Currently Amended): A process as defined in claim 25, wherein the ~~aliquot~~ first portion of the amount of said dispersing agent B in the aqueous phase is equal to from 60 to 95 % by weight of the total weight of said ~~the amount of the~~ dispersing agent B.

Claim 31 (Previously Presented): A process as defined in claim 25, wherein the water-soluble polymeric dispersing agent B is present as a mixture with at least one water-soluble polyfunctional alcohol and/or its reaction product with fatty amines.

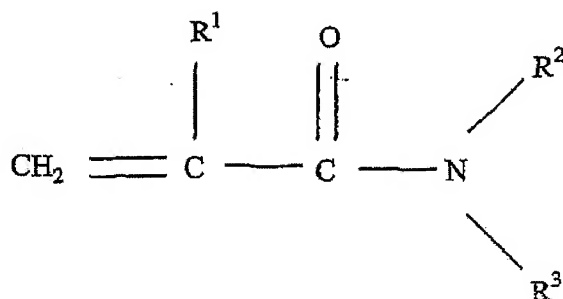
Claim 32 (Currently Amended): A process as defined in claim 31, wherein the water-soluble polymeric dispersing agent ~~[[is]]~~ B is present as a mixture with at least one of a water-soluble polyfunctional alcohol, a polyalkylene glycol, a block copolymer of propylene/ethylene oxide having molecular weights of from 50 to 50 000, a low-molecular weight polyfunctional alcohol and reaction products thereof with fatty amines containing from 6 to 22 carbons in the alkyl or alkylene radical.

Claim 33 (Previously Presented): A process as defined in claim 31, wherein said polymeric dispersing agent B is present as a mixture with at least one polyfunctional alcohol in amounts of from 5 to 50 % by weight, based on the total dispersion.

Claim 34 (Currently Amended): A process as defined in claim 31, wherein ~~said~~ the ratio, by weight, of said polymeric dispersing agent B to said polyfunctional alcohol is in the range of from 1.00 : 0.01 to 1.00 : 0.5.

Claims 35-36 (Canceled).

Claim 37 (Currently Amended): A process as defined in claim 25, wherein the ~~polymeric dispersing agent B~~ polymer A comprises at least one non-ionic monomer of the formula (I)



(I)

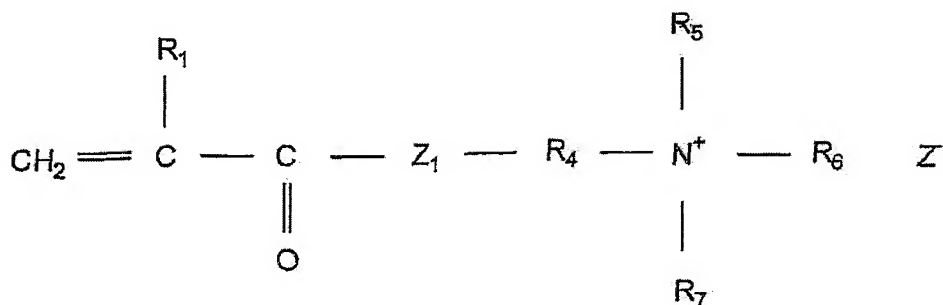
in which

R¹ stands for a hydrogen radical or a methyl radical, and

R² and R³ independently stand for hydrogen, or an alkyl or hydroxyalkyl radical each containing from 1 to 5 carbon atoms, and

R² or R³ stands for an OH group.

Claim 38 (Currently Amended): A process as defined in claim 25, wherein the ~~polymeric dispersing agent B~~ polymer A comprises one or more amphiphilic monomers of formula (II)



(II)

wherein Z_1 stands for O, NH, $[[NR_4]]$ $\underline{NR_4}$, wherein $[[R_4]]$ $\underline{R_4}$ denotes alkyl containing from 1 to 4 carbons,

R_1 stands for hydrogen or a methyl radical,

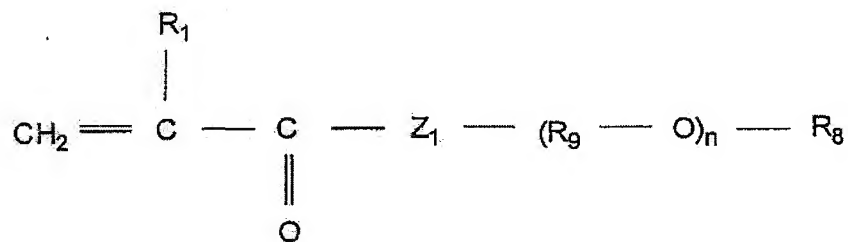
R_4 stands for alkene containing from 1 to 6 carbons,

R_5 and R_6 independently stand for an alkyl group containing from 1 to 6 carbons,

R_7 stands for an alkyl radical, an aryl radical, and/or an aralkyl radical containing from 8 to 32 carbons and

Z^- stands for halogen, pseudo-halogen, $SO_4CH_3^-$ or acetate,

or monomers of the general formula (III)



(III)

wherein

Z_1 stands for O, NH, or $[[NR_4]] NR_4$, wherein $[[R_4]] R_4$ denotes alkyl containing from 1 to 4 carbons,

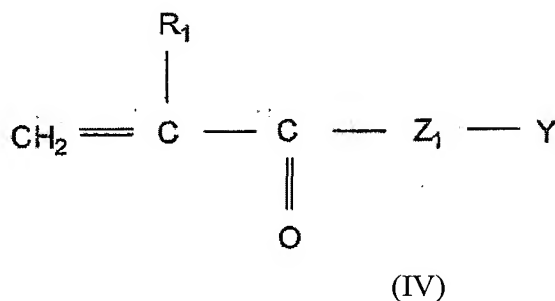
R_1 stands for hydrogen or a methyl radical,

$[[R_3]] R_8$ stands for hydrogen, an alkyl radical, an aryl radical, and/or an aralkyl radical containing from 8 to 32 carbons,

R_9 stands for an alkylene radical containing from 2 to 6 carbons, and

n stands for an integer from 1 to 50.

Claim 39 (Currently Amended): A process as defined in claim 25, wherein the ~~polymeric dispersing agent B~~ polymer A comprises cationic monomers of formula (IV)

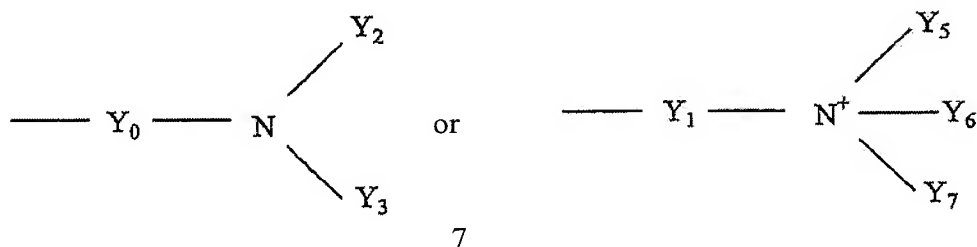


wherein

R_1 stands for hydrogen or a methyl radical,

Z_1 stands for O, NH or NR_4 where R_4 stands for an alkyl radical containing 1 to 4 carbon atoms,

Y stands for one of the groups



wherein

Y_0 and Y_1 stand for an alkylene radical or hydroxyalkylene radical containing 2 to 6 carbon atoms, and

Y_2 , Y_3 , Y_5 , Y_6 , Y_7 , independently stand for an alkyl radical containing 1 to 6 carbon atoms.

Claim 40 (Previously Presented): A process as defined in claim 25, wherein the monomer composition consists of anionic monomers.

Claims 41-42 (Canceled).

Claim 43 (Currently Amended): A process as defined in claim 25, further comprising:

cooling the reaction mixture following the polymerization and subsequently diluting the reaction mixture with the ~~residual~~ second portion of the amount of said dispersing agent B.

Claim 44 (Previously Presented): A process as defined in claim 25, further comprising:

cooling the reaction mixture to ≤ 35 °C.

Claim 45 (Previously Presented): A process as defined in claim 25, further comprising:

diluting the reaction mixture subsequently with from 5 to 50 % of said dispersing agent B by weight, based on the total weight thereof.

Claim 46 (Previously Presented): A water-in-water polymer dispersion obtained as defined in claim 25.

Claim 47 (Previously Presented): The method of claim 25, further comprising:
including the water-in-water polymer dispersion as defined in claim 46 for
solid/liquid separation in aqueous systems.

Claim 48 (Previously Presented): The method of claim 25, further comprising:
including the water-in-water polymeric dispersions as defined in claim 46 as an
auxiliary in papermaking.

Claim 49 (Previously Presented): The method of claim 25, further comprising:
including the water-in-water polymer dispersion as defined in claim 46 in retention
agent systems in papermaking.

Claim 50 (Currently Amended): A process for producing a water-in-water dispersion of one or more at least one finely dispersed, water-soluble and/or water-swellaable anionic polymers A dispersed in a continuous aqueous phase, wherein the polymer A comprises one or more anionic monomer units and, optionally, one or more of a non-ionic, amphiphilic, and cationic monomer units and the polymer A has a M_w of $>1.0 \times 10^6$ g/mol and, wherein the aqueous phase of the dispersion comprises at least one anionic polymeric dispersing agent B which comprises at least 30% by weight of one or more anionic monomers and has a weight average molecular weight M_w of not more than ~~250,000~~ 95,000 g/mol, ~~wherein the anionic polymeric dispersing agent B~~ is the process comprising:

in a first stage, free radically polymerizing a monomer composition comprising at least the anionic monomer units and, optionally, the non-ionic, amphiphilic, and cationic monomer units in the presence of at least 5% by weight of the anionic polymeric dispersing agent B based on the total weight of the dispersion and from 0.5 to 3.0 wt% of an inorganic salt, to form a reaction mixture, and

in a second stage, on completion of said radical polymerization, diluting the reaction mixture with a second amount of the anionic polymeric dispersing agent B to form the water-in-water dispersion,

wherein the anionic monomers are selected from the group consisting of

- a.) an olefinically unsaturated carboxylic acid, a carboxylic anhydride, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an ammonium salt thereof;
- b.) an olefinically unsaturated sulfonic acid, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an ammonium salt thereof;
- c.) an olefinically unsaturated phosphonic acid, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, an ammonium salt thereof; and
- d.) a sulfomethylated acrylamide, a phosphonomethylated acrylamide, a water-soluble alkali metal salt thereof, an alkaline earth metal salt thereof, and an ammonium salt thereof.

Claim 51 (New): The method of claim 25, wherein the polymeric dispersing agent B is a polyacrylate.

Claim 52 (New): The method of claim 25, wherein the polymeric dispersing agent B is potassium polyacrylate.

Claim 53 (New): The process of claim 25, wherein the inorganic salt is present in an amount of from 0.75 to 1.5 wt%.

Claim 54 (New): The method of claim 50, wherein the polymeric dispersing agent B is a polyacrylate.

Claim 55 (New): The method of claim 50, wherein the polymeric dispersing agent B is potassium polyacrylate.

Claim 56 (New): The process of claim 50, wherein the inorganic salt is present in an amount of from 0.75 to 1.5 wt%.

Claim 57 (New): The process of claim 25, wherein the anionic polymeric dispersing agent B has an average molecular weight Mw of not more than 75,000 g/mol.

Claim 58 (New): The process of claim 50, wherein the anionic polymeric dispersing agent B has an average molecular weight Mw of not more than 75,000 g/mol.